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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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|-----------------|-------------|----------------------|---------------------|------------------|

09/943,870

08/31/2001

Donald J. Remboski

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12/13/2004

MOTOROLA, INC.

CORPORATE LAW DEPARTMENT - #56-238

3102 NORTH 56TH STREET

PHOENIX, AZ 85018

EXAMINER

JAIN, RAJ K

ART UNIT

PAPER NUMBER

2664

DATE MAILED: 12/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/943,870

Applicant(s)

REMBOSKI ET AL.

Examiner

Raj Jain

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11, 13-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Behfar et al (WO 00/77620 A2) in view of Oliveira et al (US006579208B2), further in view of Lee et al. (US006609127B1).

Regarding claims 1 and 14, Behfar discloses a system for integrating components into a vehicle, wherein the components comprise devices (29-37) coupled to an in-car network (fig 2), the devices (29-37) communicating via connection media 12 (fig 1), and the network further providing easy reconfiguration and upgrade to the vehicle devices (abstract) as necessary.

Behfar fails to disclose the coupling of devices through an active network for controlling the flow of data amongst the devices.

Oliveira discloses the use of a control area network (CAN) within vehicles for the purpose of transferring data amongst different devices (such as brakes, fuel control, climate control, suspension, etc. see col 3 lines 7-31). The CAN system electronically interconnects all the network members by a simple two wire, twisted pair cable and provides high-speed serial digital data transfer between all members in the system. The network members consist of the various vehicle systems and sub-systems, or in many cases, their electronic control units.

Oliveira uses the CAN for monitoring gearshift control with digital data interface to allow

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transfer of digital data between the control unit and other vehicle systems through the CAN system (see col 4 lines 30-60). Since CANs may be used to control any number of vehicular components as well as the gear shift control (see col 3 line 20), thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a CAN network within Behfar to control plurality of network devices in order to control the flow of data amongst the devices as appropriate.

Behfar discloses a system for integrating components into a vehicle, wherein the components comprise devices (29-37) coupled to an in-car network (fig 2).

Oliveira discloses the use of a control area networks (CAN) within vehicles.

Behfar and Oliveira fail to disclose the use of active networks.

Lee discloses coupling of devices (within a home or business see col 2 line 20) through the use of control area networks (CAN), which also comprises of active networks such as WANs, LANs, etc. as well as passive networks such as fibreoptic links (see col 3 lines 29-35). Active networks and CANs provide coupling of network devices to effectively communicate throughout the network for controlling traffic flow through dynamic adaptation of processing elements deployed within the network, (see Figs 1 & 2, col 3 lines 19-27, col 4 lines 32-36).

Since CANs and active networks both provide a communications coupling and controlled data flow through network devices, therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of a CAN within Behfar for the purpose of controlling and dynamically reconfiguring data flow through any number of network devices within a vehicle that may also include active networks such as in-car Ethernet LAN.

Regarding claims 2-5 and 16, Behfar discloses active network elements as being switch, router and/or bridge (page 6 L12-23 that may include a switch, router or bridge for packet transfer).

Regarding claims 6 and 15, Behfar discloses packet data network (see abstract, page 3 L40).

Regarding claim 7, Behfar discloses IP protocol standard used for communications within the subject system (page 3 L40).

Regarding claim 8, Oliveira discloses a configurable interface for data transport, which comprises of the CAN system (see Fig 2, 250, col 10 line 46-50).

Regarding claim 9, Behfar discloses wireless communications (page 10 L36).

Regarding claims 10 and 17, Behfar discloses fault isolation and reconfiguration (page 10 L37-40).

Regarding claims 11 and 18, Behfar discloses periodically reconfigured (page 3 L36; claim 25).

Regarding claims 13 and 20, Oliveira discloses time information with respect to the CAN system in general (see col 12 lines 21-60).

Claims 12 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Behfar et al (WO 00/77620 A2) in view of Oliveira et al (US006579208B2), and further in view of Sundling et al (WO 01/19038). Behfar discloses a system for integrating components into a vehicle, wherein the components comprise devices (29-37) coupled to an in-car network (fig 2).

Oliveira discloses the use of a control area networks (CAN) within vehicles.

Behfar and Oliveira fail to disclose the use of a single node as “root node” element within a network, which is used for routing of information.

Sundling discloses the use of plurality of nodes interconnected with plurality of routing tables corresponding to each node within the system (figs 1 & 2 and abstract). Sundling’s system provides an enhanced version of a single node network (“root node”) element network for routing of information. In Sundling’s system in the event that any node should fail, alternate routing can be accomplished via other nodes as they have routing (table) information within each location. In an alternative embodiment of a similar invention one may choose to have a single node act as the prime routing source without burdening other nodes and therefore requiring less resources.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the teachings of Sundling within Behfar so as to allow routing of information from one primary node acting as the root node to all other destined nodes and therefore allowing for reduced usage of network resources.

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raj Jain whose telephone number is 571-272-3145. The examiner can normally be reached on M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

RJ
November 23, 2004

A handwritten signature in black ink, consisting of stylized, overlapping loops and a long horizontal stroke extending to the right.